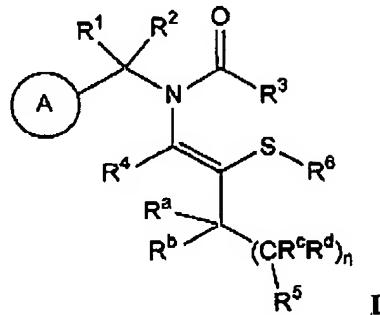


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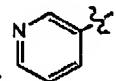
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Claim Amendments.

1. (currently amended): A compound of formula I:



or a pharmaceutically acceptable salt, ester, salt of an ester, stereoisomer, enantiomer, isotope, or tautomer thereof, wherein:



ring A is optionally substituted and is ;

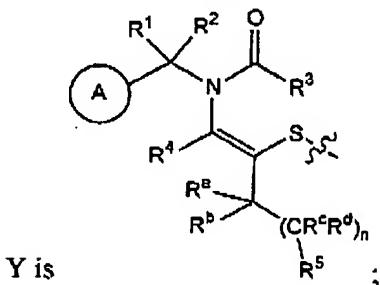
each R¹ and R² is independently H, alkyl, or fluoroalkyl;

R³ is H, alkyl, fluoroalkyl, aralkyl, carbocyclylalkyl, heterocyclyl, carbocyclyl, heterocyclylalkyl, aryl, heteroaryl, heteroaralkyl, -C(O)R, -OR, -(CH₂)₁-₆OR, -(CH₂)₁-₆N(R)₂, -N(R)₂, or -C(H)(OR)R;

R⁴ is H, alkyl, fluoroalkyl, -CO₂R, -CON(R)₂, carbocyclyl, carbocyclylalkyl, heteroaryl, or heterocyclyl;

R⁵ is -OR⁷ or -NR⁸R⁹;

R⁶ is -C(O)R, -C(S)R, -C=C-C(O)R, -SR, -S-W-OR⁷, or Y;



Y is ;

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R⁷ is R°, -C(O)R, -C(O)N(R)₂, -C(O)OR, -(CH₂)₁₋₆-C(O)R, -PO₃M_x, -P(O)(alkyl)OM', -(PO₃)₂M_y, carbocyclyl, aryl, heterocyclyl, heteroaryl, carbocyclylalkyl, aralkyl, heterocyclylalkyl, or heteroaralkyl;
x is 1 or 2;
y is 1, 2 or 3;
each M is independently H, Li, Na, K, Mg, Ca, Mn, Co, Ni, Zn, or alkyl;
M' is H, Li, Na, K, or alkyl;
R⁸ is H or alkyl;
R⁹ is H, alkyl, -C(O)R, -C(O)N(R)₂, -C(O)OR, -SO₂R, -SO₂N(R)₂, carbocyclyl, aryl, heterocyclyl, heteroaryl, carbocyclylalkyl, aralkyl, heterocyclylalkyl, or heteroaralkyl;
each R^a and R^b is independently H, OR°, alkyl, or fluoroalkyl;
each R^c and R^d is independently H, alkyl, or fluoroalkyl;
n is 0-4;
W is alkylene, arylene, heteroarylene, carbocyclylene, or heterocyclylene;
R° is H or alkyl; and
R is R°, carbocyclyl, aryl, heterocyclyl, heteroaryl, carbocyclylalkyl, aralkyl, heterocyclylalkyl, or heteroaralkyl.

2. (previously presented) The compound of claim 1, wherein R⁶ is Y or -SR.

3. (cancelled).

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4. (previously presented) The compound of claim 1, wherein:

- i) R¹, R² and R⁴ are independently H, C₁₋₆ alkyl or fluoro(C₁₋₆ alkyl);
- ii) R³ is H, alkyl, fluoroalkyl, -(CH₂)₁₋₆OR, -(CH₂)₁₋₆N(R)₂, -C(O)R, -C(H)(OR)R, aralkyl, heterocyclyl, heterocyclylalkyl, heteroaryl, or heteroaralkyl;
- iii) R⁶ is -C=C-C(O)R, -SR, -S-W-OR⁷, or Y;
- iv) R⁷ is H, alkyl, -C(O)R, -PO₃M_x, -(PO₃)₂M_y, -P(O)(alkyl)OM^r, -C(O)N(R)₂, or -C(O)OR; or R⁹ is H, alkyl, -C(O)R, -C(O)N(R)₂, -C(O)OR, -SO₂R, 5-membered heterocyclyl, or a 5-membered heteroaralkyl; and
- v) n is 1.

5. (previously presented) The compound of claim 4, wherein R is R⁰, carbocyclyl, aryl, heteroaryl, heterocyclyl, aralkyl, heterocyclylalkyl or heteroaralkyl.

6. (previously presented) The compound of claim 5, wherein R⁰ is H or C₁₋₆ alkyl optionally substituted with halo, hydroxy or amino.

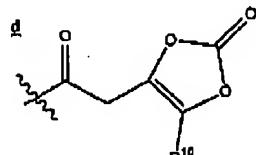
7. (previously presented) The compound of claim 4, wherein:

- i) ring A is optionally substituted with -NH₂, alkyl, -OC(O)R[†], halo, -OR[†], -CF₃, -OCF₃, -SCF₃, -SR[†], -R[†], -NR[†]C(O)R[†], -CO₂R[†], -NO₂, -N(R[†])₂, -CN, -C(O)R[†], -C(O)N(R[†])₂, -SO₂N(R[†])₂, -NR[†]CO₂R[†], -C(O)C(O)R[†], -OC(O)N(R[†])₂, -S(O)_tR[†], -C(O)CH₂C(O)R[†], -NR[†]SO₂R[†], or -C(=S)N(R[†])₂; and R[†] is 3-6 membered unsubstituted cycloalkyl, phenyl, benzyl, naphthyl, pyridyl, or C₁₋₆ alkyl optionally substituted with halo;
- ii) R³ is H, C₁₋₆ alkyl, -(CH₂)₁₋₆OR⁰ or -CH(OR⁰)R⁰;
- iii) R⁶ is -C=C-C(O)R, -SR, -S-W-OR⁷ or Y; and
- iv) R⁸ is H or C₁₋₆ unsubstituted alkyl.

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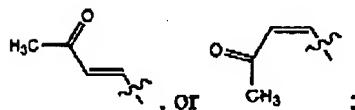
8. (currently amended) The compound of claim 7, wherein R⁷ or R⁹ is H, a polysaccharide, or



, wherein R¹⁰ is H, alkyl, or aryl.

9. (currently amended) The compound of claim 7, wherein:

- i) R¹, R² and R⁴ are independently H, methyl, ethyl, -CH₂F, -CHF₂, or -CF₃;
- ii) R³ is H, methyl, ethyl, -CH(OH)CH₃, -CH₂OH, or -CH₂CH₂OH;
- iii) R⁶ is -S-(heterocyclalkyl), (-S-(unsubstituted C₁₋₆ alkyl), Y,

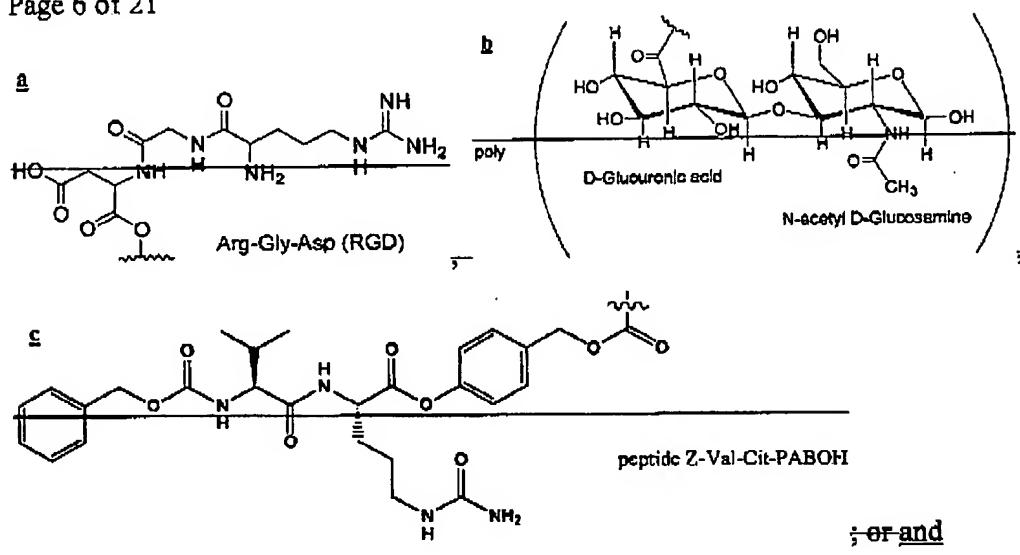


- iv) R⁸ is H, methyl, or ethyl; and

- v) R⁷ is H, methyl, ethyl, -C(O)Me, -C(O)Et, -C(O)NMe₂, -C(O)-p-OMe-phenyl, -C(O)O-phenyl, -PO₃H₂, -P(O)(OMe)₂, -P(O)(OMe)OH, -P(O)(Me)OH, or -P(O)(OH)OP(O)(OH)(OH); and R¹⁴ is selected from the group consisting of:

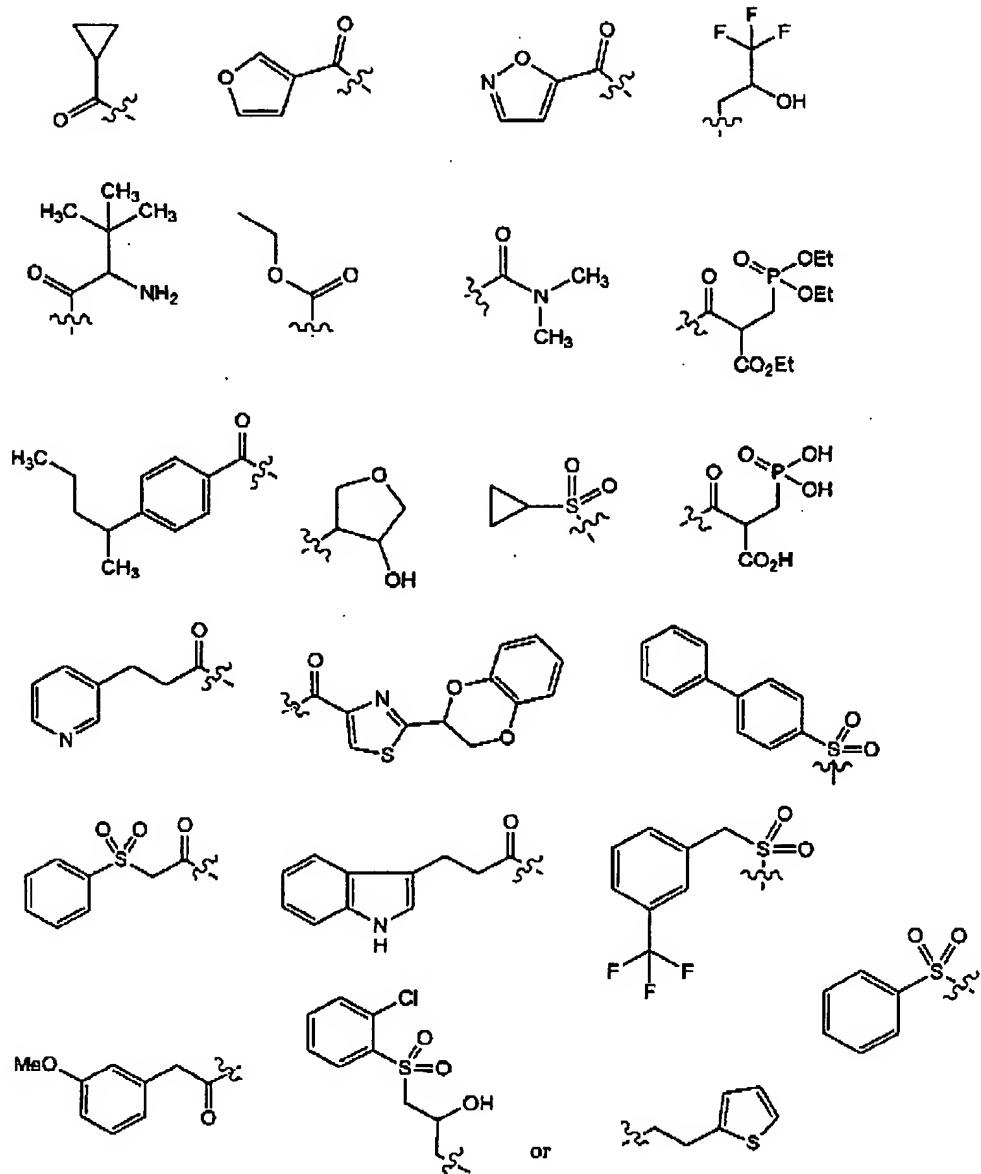
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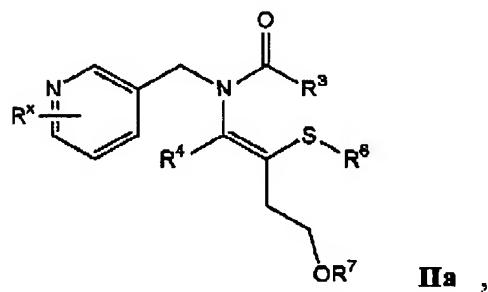


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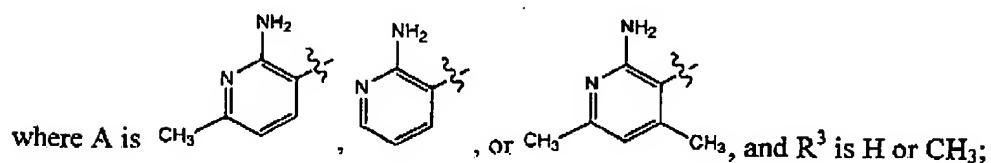
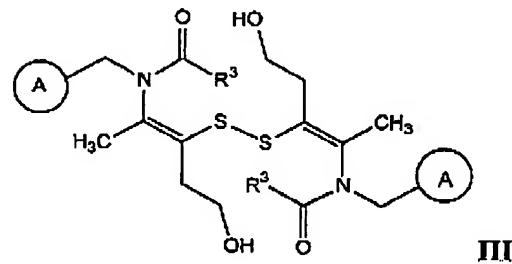
10. (currently amended) The compound of claim_1, wherein said compound is selected from the group consisting of the compounds of:

(1) formula IIa:



where R³ and R⁴ are independently H or alkyl, R⁶ is -SR, R⁷ is R°, and R^x can be the same or different and is selected from the group consisting of alkyl and NH₂;

(2) formulae III:

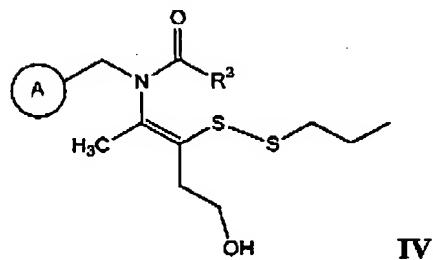


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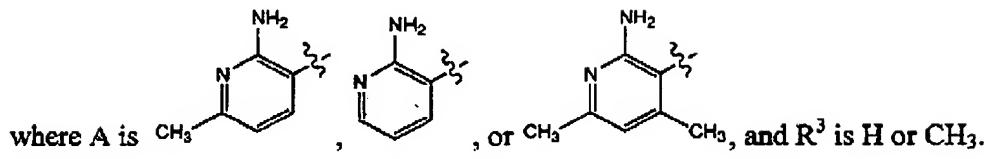
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and

(3) formulae IV :



IV



where A is CH_3 , or CH_3 , and R^3 is H or CH_3 .

11. (previously presented) A pharmaceutical composition comprising a compound of claim 1 and a pharmaceutically acceptable carrier.

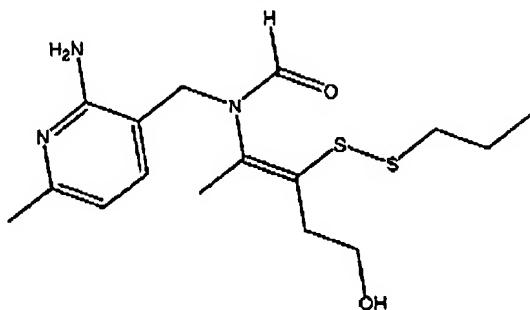
12.-22. (cancelled).

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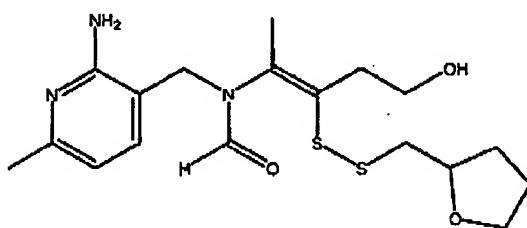
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23. (currently amended) A compound of the formula:

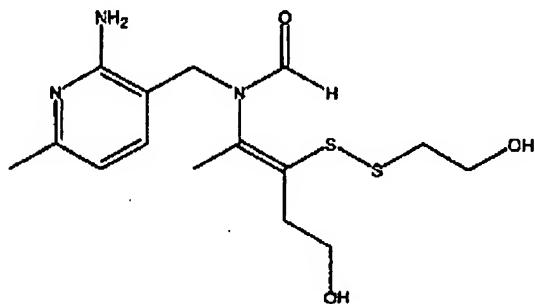
(a)



(b)



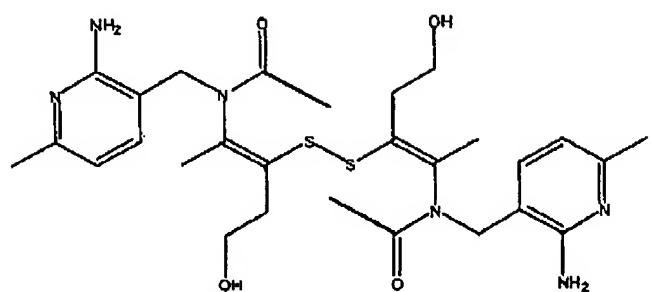
(c)



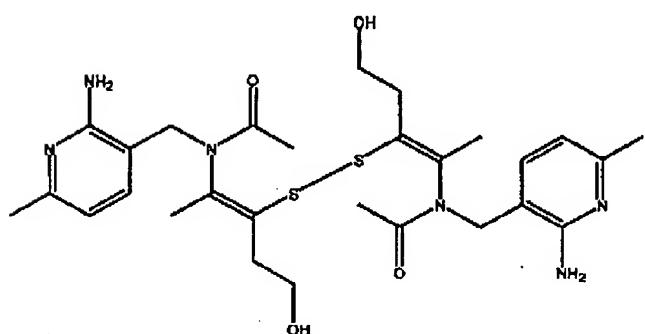
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(d)



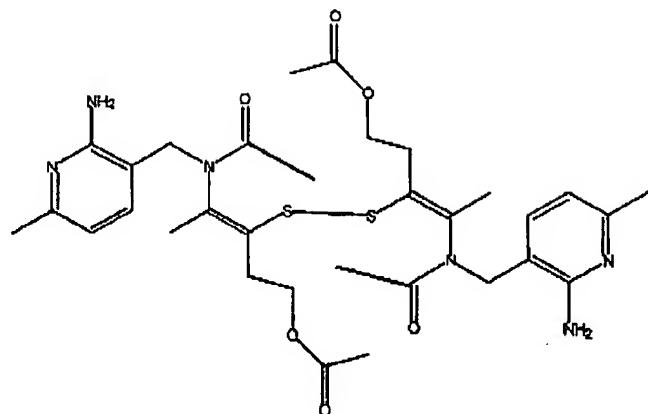
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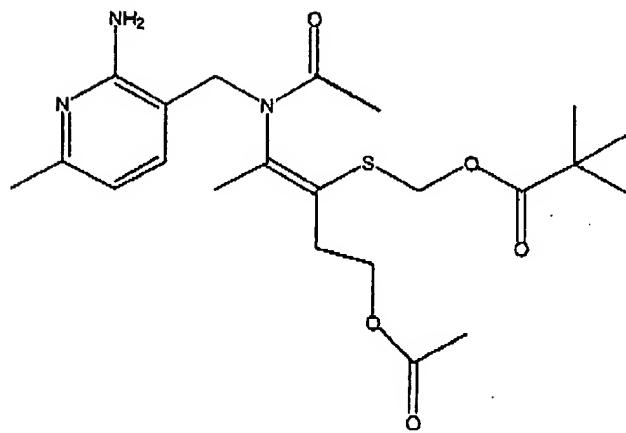
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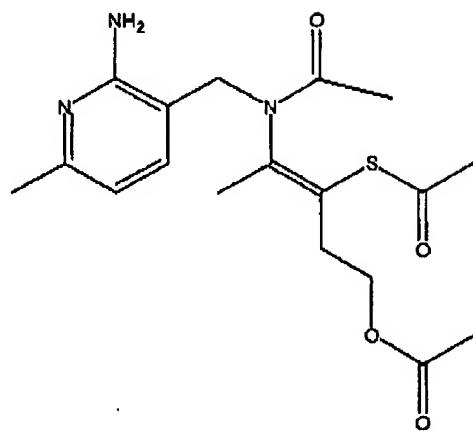
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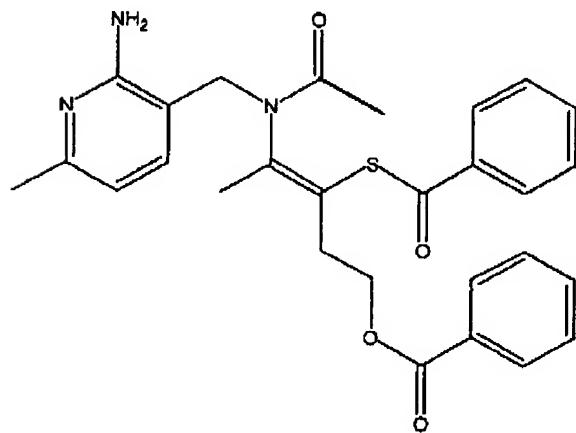
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(h)



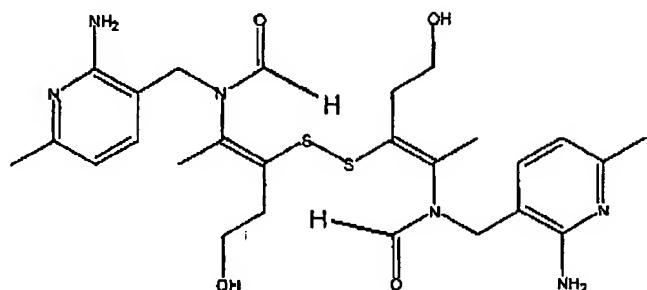
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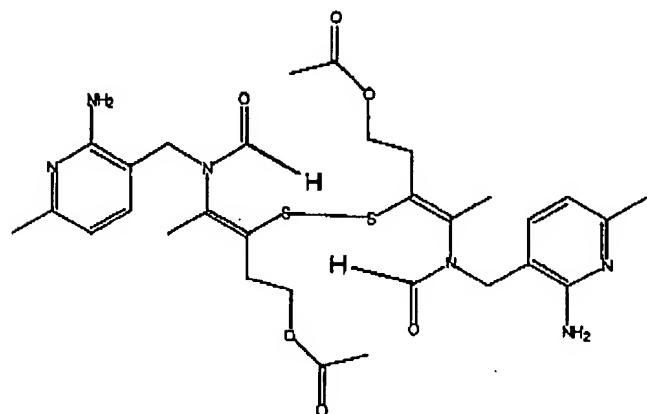
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(j)



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(k)

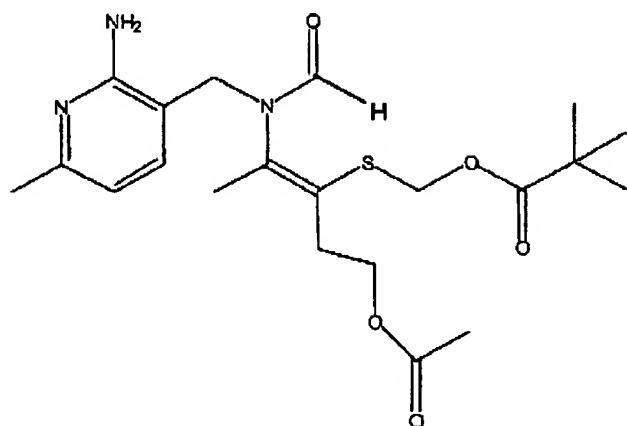


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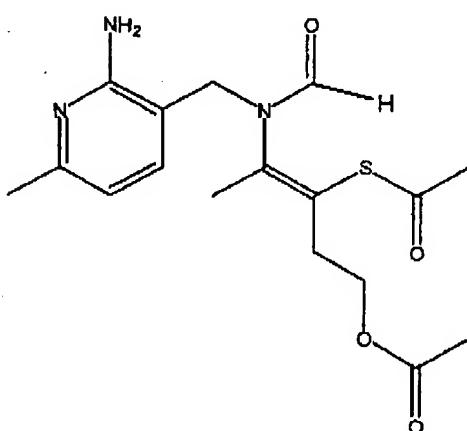
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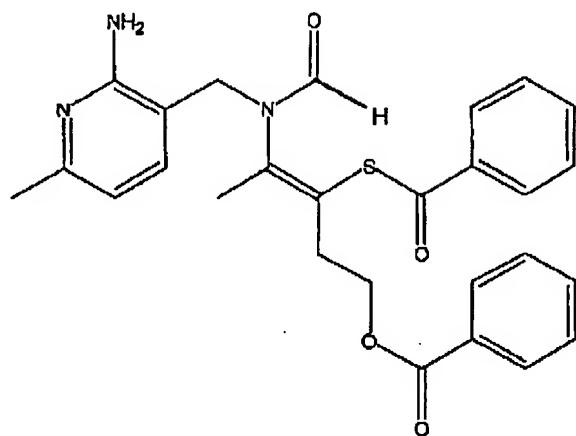
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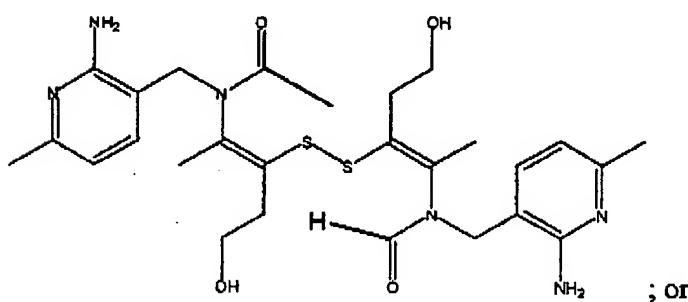
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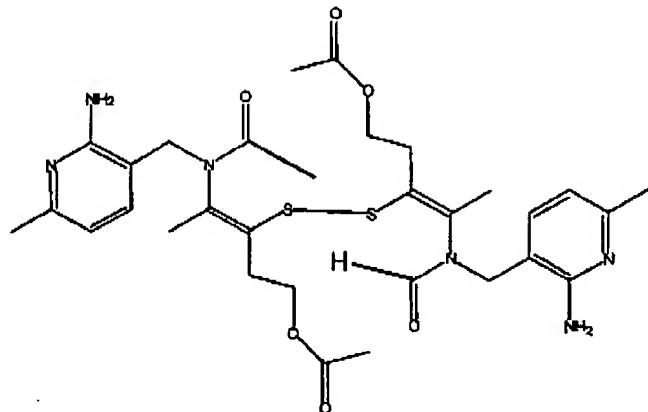


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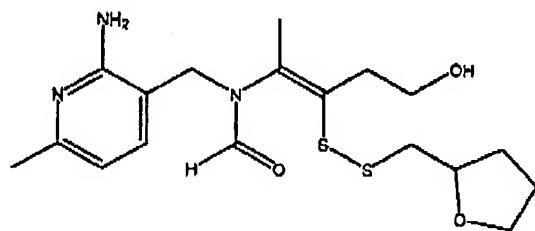
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(p)



or a pharmaceutically acceptable salt, ester, salt of an ester, stereoisomer, enantiomer, isotope, or tautomer thereof.

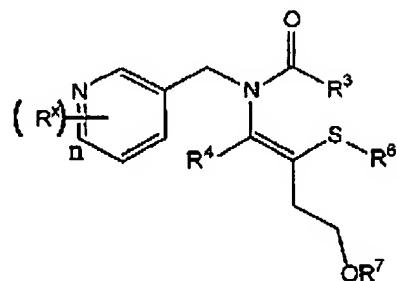
24. (previously presented) The compound of claim 23, wherein the compound is:



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25. (currently amended) A compound of the formula



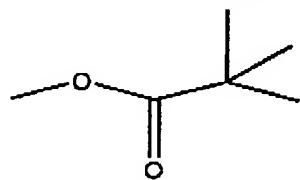
or a pharmaceutically acceptable salt, ester, salt of an ester, stereoisomer, enantiomer, isotope, or tautomer thereof, wherein:

(a) R³ and R⁴ may each be the same or different to the extent they occur more than once in the compound and are independently H or alkyl;

(b) R⁷ may be the same or different to the extent it occurs more than once in the compound and is independently R° or -C(O)R, where R° is H or alkyl and R is R°, carbocyclyl, aryl, heterocyclyl, heteroaryl, carbocyclylalkyl, aralkyl, heterocyclylalkyl, or heteroaralkyl;

(c) R^x may be the same or different to the extent it occurs more than once in the compound and is independently alkyl or NH₂;

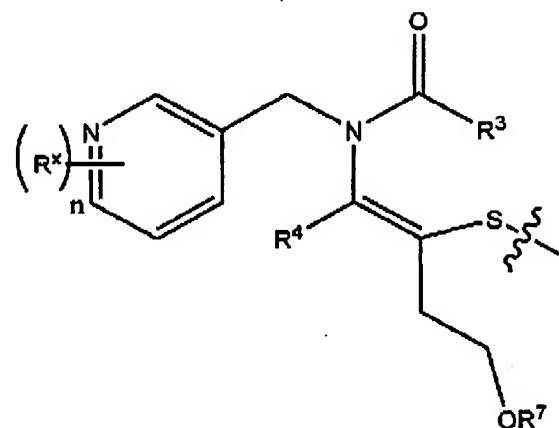
(d) R⁶ is -SR, -C(O)R,



, or

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; and

(e) n is 0, 1, 2, or 3.